

NOISE BLANKER 2 – UPDATED FUNCTION from firmware v1.10

Adds a new algorithm within the main band NB2 (Digital noise blanker in the IF stage).

- When pressing and holding in the [NB2] key of the main band, the NB2 function setting display appears on the main screen. This then allows toggling between "TYPE A" (conventional algorithm) and "TYPE B" (newly added algorithm) by pressing the [TYPE](F6) key. If "TYPE B" is selected, the "WIDTH" (width of the pulse noise blanking) and "DEPTH" (depth of the pulse noise blanking) parameters can be adjusted.
- Pressing and holding in [NB2] or pressing [ESC] closes the NB2 function setting screen.
- The "TYPE A" discriminates and suppresses the pulse noise by calculating the received signal's envelope. Since the algorithm does not cut off the receiving signal, it would be effective for a weak signal buried in strong pulse noise conditions.
- The "TYPE B" discriminates and blanks the pulse noise by calculating the transient of signal amplitude. However, it cuts off the received signal momentarily, thus allowing adjustment of the "WIDTH" and "DEPTH" to appropriate levels.
- The "TYPE B" is not applied to the sub band due to limitations of the DSP memory capacity.
- For both of the NB2 "TYPE A" and "TYPE B", using NB1 (Analog noise blanker in the IF stage) simultaneously, or configuring a wider roofing filter manually, it would be effective to reduce the pulse noise level under some noise conditions.